

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

<i>In re</i> Application of)	
)	Prior Group Art Unit: 1642
Schneck <i>et al.</i>)	
)	Prior Examiner: C. Yaen
Serial No. TBA)	
)	Atty. Dkt. No. 01107.00466
Filed: even herewith)	

For: **USE OF MULTIVALENT CHIMERIC PEPTIDE-LOADED MHC/IG MOLECULES TO
DETECT, ACTIVATE, OR SUPPRESS ANTIGEN-SPECIFIC T CELL-DEPENDENT
IMMUNE RESPONSES**

INFORMATION DISCLOSURE STATEMENT

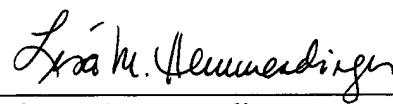
MAIL STOP New Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §§ 1.97 and 1.98, enclosed is PTO Form-1449 listing documents for consideration by the Examiner during the prosecution of the subject application. All cited art was previously disclosed or cited in parent application Serial No. 09/150,622, filed September 10, 1998. Copies of the cited art are available in the parent application.

Respectfully submitted,

Date: April 5, 2004

By: 
Lisa M. Hemmendinger
Registration No. 42,653

Customer No. 22970

PATENT & TRADEMARK OFFICE-1449 (Modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT	ATTY. DOCKET NO. 01107.00466	SERIAL NUMBER tba
	APPLICANT Jonathan Schneck et al.	
	FILING DATE April 5, 2004	GROUP ART UNIT 1642 (prior)

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	5,420,244	5/30/95	Rudolph et al.			
	5,635,363	6/3/1997	Altman et al.			

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO	
	94/19473A	9/1/94	WIPO				
	94/26903	11/24/94	WIPO				
	94/28871	12/22/94	WIPO				
	96/20215	7/4/96	WIPO				
	97/35991	10/2/97	WIPO				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Casares et al. "Engineering and Characterization of a Murine MHC Class II-Immunoglobulin Chimera Expressing an Immunodominant CD4 T Viral Epitope" Protein Engineering, Vol. 10, No. 11, November 1997, pages 1295-1301
	Kalandadze et al. "Expression of Recombinant HLA-DR2 Molecules" The Journal of Biological Chemistry, Vol 271, No. 33, August 16, 1996, pp. 20156-20162
	Scott et al. "Role of Chain Pairing for the Production of Functional Soluble IA Major Histocompatibility complex Class II Molecules" J. Exp. Med. Vol. 183, May 1996, pp. 2087-2095

EXAMINER	DATE CONSIDERED
EXAMINER: Initial citation if reference was considered. Draw line through citation if not in conformance to MPEP 609 and not considered. Include copy of this form with next communication to applicant.	

PATENT & TRADEMARK OFFICE-1449 (Modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT	ATTY DOCKET NO. 001107.00466	SERIAL NUMBER tba
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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	5,574,205	11/12/1996	Kuchelapati et al.			
	5,679,641	10/21/1997	Melief et al.			
	5,820,866	10/13/1998	Kappler et al.			

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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO
	WO 99/09064	2/25/1999	WIPO			
	WO 93/24525	12/9/1993	WIPO			
	WO 94/24290	10/27/1994	WIPO			
	WO 98/03552	1/29/1998	WIPO			
	WO 97/44667	11/27/1997	WIPO			

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	Gnjatic et al. "Mapping and ranking of potential cytotoxic T epitopes in the p53 protein: effect of mutations and polymorphism on peptide binding to purified and refolded HLA molecules" Eur. J. Immunol. 25(6):1638-42 (June 1995) (Abstract)
	Kozono et al., "Production of soluble MHC class II proteins with covalently bound single peptides" Nature 369(6476):151-54(May 1994)
	Lee et al., "Functional cell surface expression by a recombinant single-chain class I major histocompatibility complex molecule with a cis-active beta 2-microglobulin domain" Eur. J. Immunol. 24(11):2633-39 (Nov. 1994) (Abstract)
	Lepley et al., "Biochemical and Functional Characterization of Soluble Multivalent MHC L ⁺ /Fcγ1 and L ⁺ /Fcμ Chimeric Proteins Loaded with Specific Peptides" Transplantation, 63:765-774 (March 15, 1997)
	Lone et al. "In Vitro Induction of Specific Cytotoxic T Lymphocytes Using Recombinant Single-Chain MHC Class I/Peptide Complexes" J. Immunother. 21(4):283-294 (1998)
	Mage et al. "A recombinant, soluble, single-chain class I major histocompatibility complex molecule with biological activity" PNAS 89(22):10658-62 (Nov. 1992)
	McCarty et al. "Targeting p53 for adoptive T-cell immunotherapy" Cancers Res. 58, 2601-05 (June 15, 1998) (Abstract)
	McCarty et al. "An HLA-restricted, p53 specific immune response from HLA transgenic p53 knockout mice" Ann Surg Oncol 1998 Jan-Feb;5(1):93-9
	Mottez et al. "Cells Expressing a Major Histocompatibility Complex Class I Molecule with a Single Covalently Bound Peptide are Highly Immunogenic" J. Exp. Med., 181:493-502 (Feb. 1995)
	White et al. "Soluble Class I MHC with β2-Microglobulin Covalently Linked Peptides: Specific binding to a T Cell Hybridoma" J. Immunol. 162(5):2671-2676 (March 1999)
	Zimmer et al. "Expression of a Functional Chimeric Ig-MHC Class II Protein" J. Immunol. 148(1):272-6 (Jan. 1992)

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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	5,869,270	2/9/1999	Rhode et al.			
	6,015,884	1/18/2000	Schneck et al.			
	5,652,342	7/29/1997	Zimmerman et al.			
	6,011,146	1/4/2000	Mottez et al.			
	5,284,935	2/8/1994	Clark et al.			

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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO
	WO 93/17095	9/2/1993	WIPO			
	WO 98/10284	3/12/1998	WIPO			
	WO 99/50637	10/7/1999	WIPO			
	0 352 761	07/25/1989	Europe			
	WO 98/06749	2/19/1998	WIPO			
	WO 99/64597	12/16/1999	WIPO			
	WO 99/42597	8/26/1999	WIPO			

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	Nijman et al. "Characterization of cytotoxic T lymphocyte epitopes of a self-protein, p53, and a non-self-protein, influenza matrix: relationship between major histocompatibility complex peptide binding affinity and immune responsiveness to peptides" J. Immunother 1993 Aug;14(2):121-6 (Abstract)
	Vierboom et al. "Tumor eradication by wild-type p53-specific cytotoxic T lymphocytes" J. Exp Med 1997 Aug 29;186(5):695-704 (Abstract)
	Melief and Kast "T-cell immunotherapy of cancer" Res Immunol 1991 Jun-Aug; 142(5-6):425-9 (Abstract)
	DeLeo "p53-based immunotherapy of cancer" Crit Rev Immunol 1998;18(1-2):29-35 (Abstract)
	Bertholet et al. "Cytotoxic T lymphocyte responses to wild-type and mutant mouse p53 peptides" Eur J Immunol 1997 Mar;27(3):798-801 (Abstract)
	Biggs et al. "Targeting p53 as a general tumor antigen" Proc Natl Acad Sci USA 1995 Dec 19;92(26):11993-7 (Abstract)
	Mottez et al. "A single-chain murine class I major transplantation antigen" Eur J Immunol 1991 Feb;21(2):467-71

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	5,116,964	5/26/92	Capon et al.			

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	93/10220	5/27/93	WIPO			

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	J. Dal Porto et al. "A soluble divalent class I major histocompatibility complex molecule inhibits alloreactive T cells at nanomolar concentrations" Proceedings of the National Academy of Sciences Vol. 90, 7/93 pages 6671-6675
	T. Johansen et al. "Potent inhibition of alloreactive T cells by nanomolar concentrations of a divalent soluble class I MHC molecule" The Journal of Immunology, Vol. 150, No. 8, part 2, April 15, 1993, page 83A
	C. Gregoire et al. "Engineered secreted T-cell receptor alpha-beta heterodimers" Proceedings of the National Academy of Sciences Vol. 88, September 1991, pages 8077-8081
	D. Eilat et al. "Secretion of a soluble, chimeric gamma-delta T-cell receptor-immunoglobulin heterodimer" Proceedings of the National Academy of Sciences, Vol. 89, August 1992, pages 6871-6875
	S. Weber et al. "Specific low-affinity recognition of major histocompatibility complex plus peptide by soluble T-cell receptor" Nature, Vol. 356, April 30, 1992, pages 792-796
	H-C Chang et al. "A general method for facilitating heterodimeric pairing between two proteins: Application to expression of alpha and beta T-cell receptor extracellular segments" Proceedings of the National Academy of Sciences Vol. 91, November 1994, pages 11408-11412
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	J. Schneck et al. "Specific inhibition of graft rejection by soluble MHC superdimers" The FASEB Journal, Vol. 10, No. 6, April 30, 1996, page A1473
	M. Lebowitz et al. "Specificity of soluble 2C TcR/Ig superdimers for peptide/MHC complexes" The FASEB Journal, Vol 10, No. 6, April 30, 1996, page A1178
	J. D. Altman et al. "Phenotypic Analysis of Antigen-Specific T Lymphocytes" Science, Vol. 274, October 4, 1996, pages 94-96

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